

In the Claims:

Please amend claims 1-10, add new claims 11-14 as indicated below. This listing of claims replaces all prior versions.

1. (Currently amended) A method of setting a slice level (SL) in a binary signal (T) in presence of noise, the binary signal having a first signal level (A) during a first signal portion and a second signal level (B) during a second signal portion, the method comprising the steps of:

[[-]] setting the slice level (SL) initially at a level intermediate the first (A) and the second (B) signal level,

[[-]] providing a noise indication (V_{en}) by measuring a first noise level (X) during the first signal portion, and

[[-]] adjusting the slice level (SL) using the noise indication (V_{en}), ~~characterized in that wherein~~

[[-]] the step of providing a noise indication (V_{en}) includes measuring a second noise level (Y) during the second signal portion, and ~~in that~~

[[-]] the step of adjusting the slice level (SL) includes adjusting the slice level substantially uniformly during both the first and the second signal portions.

2. (Currently Amended) A method ~~according to claim 1, of setting a slice level in a binary signal in the presence of noise, the binary signal having a first signal level and a first noise level during a first signal portion and a second signal level and a second noise level during a second signal portion, the method comprising:~~

setting wherein the slice level (SL) is set at to a value substantially about equal to half the difference between the magnitudes of the first (A) and the second (B) signal levels minus half the difference between the magnitudes of the first (X) and the second (Y) noise levels.

3. (Currently Amended) A method according to claim 1, wherein measuring the respective noise levels (X, Y) involves detecting peaks in the binary signal (T).

4. (Currently Amended) A device (10) for setting the a slice level (SL) in a binary signal (T) in the presence of noise, characterized by comprising:

[[-]] a first level shifter means (11) coupled between a pair of input terminals (15) for receiving the binary signal (T) and a pair of output terminals (16) for supplying the an adjusted binary signal,

[[-]] a second level shifter means (12) coupled to the pair of input terminals (15),

[[-]] a noise peak level detection unit that means (13) coupled to the second level shift means (12) for receives ing-shifted input signals and produces ing-a noise indication signal (V_{en}) indicative of any difference in noise levels between signal portions of the binary signal having different signal levels (A, B), the noise peak level detection unit coupled to the second level shifter, and

[[-]] an adjustment connection (14) for feeding the noise indication signal (V_{en}) to both the first and the second level shifters means (11,12) so as to compensate for any difference in the noise levels,

wherein the first shifter subtracts the noise indication signal from the signal levels of the binary signal to produce the shifted input signals.

5. (Currently Amended) A device according to claim 4, wherein the noise peak level detection means (13) comprise unit includes a first peak detector (17) for detecting peaks in a first signal level (A) of the binary signal (T) and supplying a first peak detection signal, a second peak level detector (18) for detecting peaks in a second signal level (B) of the binary signal (T) and supplying a second peak detection signal, and a differential amplifier for amplifying the a difference between signal of the first and the second peak detection signals so as to produce the noise indication signal (V_{en}).

6. (Currently Amended) A device according to claim 4, wherein the adjustment connection (14) ~~comprises~~ includes a low-pass filter (14) for filtering the noise indication signal (V_{en}).

7. (Currently Amended) A device ~~according to claim 4,~~ for setting a slice level in a binary signal in the presence of noise, comprising:

a first level shifter coupled between a pair of input terminals for receiving the binary signal and a pair of output terminals for supplying an adjusted binary signal;

a second level shifter coupled to the pair of input terminals;

a noise peak level detection unit that receives shifted input signals and produces a noise indication signal indicative of any difference in noise levels between signal portions of the binary signal having different signal levels, the noise peak level detection unit coupled to the second level shifter; and

an adjustment connection for feeding the noise indication signal to both the first and the second level shifters to compensate for any difference in the noise levels,

wherein at least one of the first signal shifter ~~ing means (11)~~ and/or the second signal shifter ~~ing means (12)~~ comprise include a series connection of a resistive element (~~R1; R2; R3; R4~~), a transistor (~~T1; T2; T3; T4~~) and a current source (~~SI~~), the bases of the transistors being coupled to receive the noise indication signal (~~V_{con}~~).

8. (Currently Amended) A device according to claim 4, wherein the noise peak level detection unit means (13) ~~further includes~~ comprise an a route mean square (RMS) level detector (22) for detecting the RMS level of the binary signal (~~T~~), a first differential amplifier (~~23~~) for amplifying ~~the a difference between of the a first level (A)~~ of the binary signal and the RMS level to ~~supply produce~~ a first level compensated noise signal that is supplied to the a first peak detector (17), and a second differential amplifier (~~24~~) for amplifying ~~the a difference between of the a second level (B)~~ of the binary signal and the RMS level to produce a second level compensated noise signal that is supplied to the a second peak detector (18).

9. (Currently Amended) A device according to claim 8, wherein the RMS level detector (~~22~~) ~~comprises~~ includes a series connection of a transistor (~~T5; T6~~), a resistor (~~R5~~) and a capacitor (~~C5~~).

10. (Currently Amended) A device (~~10~~) for detecting ~~the a~~ noise level in a binary signal (~~T~~), comprising:

a noise peak level detection unit means (13) for receiving input signals and producing a noise indication signal (~~V_{en}~~), ~~characterized in that the noise peak level detection unit means (13) comprise~~ including an a route mean square (RMS) level detector (22) for detecting the RMS level of the binary signal (T), a first differential amplifier (23) for amplifying the a difference between of the a first level (A) of the binary signal and the RMS level to supply produce a first level compensated noise signal that is supplied to the a first peak detector (17), and a second differential amplifier (24) for amplifying the a difference between of the a second level (B) of the binary signal and the RMS level to produce a second level compensated noise signal that is supplied to the a second peak detector (18).

11. (New) A device for setting a slice level in a binary signal in the presence of noise, the device comprising:

a first level shifter coupled between a pair of input terminals for receiving the binary signal and a pair of output terminals for supplying an adjusted binary signal,

a second level shifter coupled to the pair of input terminals,

a noise peak level detection unit that receives shifted input signals and produces a noise indication signal indicative of any difference in noise levels between signal portions of the binary signal having different signal levels, the noise peak level detection unit coupled to the second level shifter, and

an adjustment connection for feeding the noise indication signal to both the first and the second level shifters to compensate for any difference in the noise levels,

wherein the noise peak level detection unit includes a route mean square (RMS) level detector for detecting the RMS level of the binary signal, a first differential amplifier for amplifying a difference between a first level of the binary signal and the RMS level to produce a first level compensated noise signal that is supplied to a first peak detector, and a second differential amplifier for amplifying a difference between a second level of the binary signal and the RMS level to produce a second level compensated noise signal that is supplied to a second peak detector.

12 (New) A device according to claim 11, wherein the RMS level detector includes a series connection of a transistor, a resistor and a capacitor.

13. (New) A device according to claim 11, wherein at least one of the first signal shifter and the second signal shifter includes a series connection of a resistive element, a transistor and a current source, the bases of the transistors being coupled to receive the noise indication signal.

14. (New) A device according to claim 11, wherein the adjustment connection includes a low-pass filter for filtering the noise indication signal.